

**What is claimed is:**

1. An operation apparatus for use with a system to deal with operation information of the system, comprising:

an operation piece manually operable to move in a linear or circular direction to a position indicative of the operation information;

a detection section that detects the position of the operation piece and outputs position data corresponding to the detected position;

an acquiring section that provisionally acquires a plurality of reference position data which are outputted from the detection section when the operation piece is placed at a plurality of reference positions such that the respective reference position data correspond to the respective reference positions; and

a correcting section that corrects the position data outputted from the detection section according to the provisionally acquired reference position data and outputs the corrected position data to the system.

2. An operation apparatus for use with a system to deal with operation information of the system, comprising:

an operation piece manually operable to move in a linear or circular direction to a position indicative of the

operation information;

a detection section that detects the position of the operation piece and outputs position data PD corresponding to the detected position;

a first acquiring section that provisionally acquires first reference position data  $a_i$  which is outputted from the detection section when the operation piece is placed at a first reference position, and that provisionally acquires second reference position data  $a_{i+1}$  which is outputted from the detection section when the operation piece is placed at a second reference position;

a second acquiring section that acquires first correct position data  $b_i$  which is predetermined in correspondence to the first reference position and acquires second correct position data  $b_{i+1}$  which is predetermined in correspondence to the second reference position, and that calculates a coefficient  $C_i$  according to the following first equation  $C_i = (b_{i+1} - b_i)/(a_{i+1} - a_i)$ ; and

a correcting section that operates when the position data PD falls between the first reference position data  $a_i$  and the second reference position data  $a_{i+1}$  for correcting the position data PD outputted from the detection section according to the following second equation and outputting the corrected position data CPD to the system, where the second equation is  $CPD = b_i + C_i \times (PD - a_i)$ .

3. An operation apparatus for use with a system to deal with operation information of the system, comprising:

an operation piece manually operable to move in a linear or circular direction to a position indicative of the operation information;

a detection section that detects the position of the operation piece and outputs position data corresponding to the detected position;

a drive section responsive to target position data inputted from the system to automatically move the operation piece to a target position corresponding to the inputted target position data;

an acquiring section that provisionally acquires a plurality of reference position data which are outputted from the detection section when the operation piece is placed at a plurality of reference positions such that the respective reference position data correspond to the respective reference positions; and

a converting section that converts the target position data inputted from the system according to the respective reference position data, and outputs the converted target position data effective to enable the drive section to accurately place the operation piece at the target position.

4. The operation apparatus according to claim 3, further comprising a control section that controls the drive section to stop the operation piece when the detected position data outputted from the detection section coincides with the converted target position data.

5. An operation apparatus for use with a system to deal with operation information of the system, comprising:

an operation piece manually operable to move in a linear or circular direction to a position indicative of the operation information;

a detection section that detects the position of the operation piece and outputs position data corresponding to the detected position;

a drive section responsive to target position data TPD inputted from the system to automatically move the operation piece to a target position corresponding to the inputted target position data TPD;

a first acquiring section that provisionally acquires first reference position data  $a_j$ , which is outputted from the detection section when the operation piece is placed at a first reference position, and that provisionally acquires second reference position data  $a_{j+1}$  which is outputted from the detection section when the operation piece is placed at a second reference position;

a second acquiring section that acquires first correct position data  $b_j$  which is predetermined in correspondence to the first reference position and acquires second correct position data  $b_{j+1}$  which is predetermined in correspondence to the second reference position, and that calculates a coefficient  $D_j$  according to the following first equation  $D_j = (a_{j+1} - a_j) / (b_{j+1} - b_j)$ ; and

a converting section that operates when the target position data TPD falls between the first correct position data  $b_j$  and the second correct position data  $b_{j+1}$  for converting the target position data TPD according to the following second equation and outputting the converted target position data XPD effective to enable the drive section to accurately place the operation piece at the target position, where the second equation is presented by  $XPD = a_j + D_j \times (TPD - b_j)$ .

6. The operation apparatus according to claim 5, further comprising a control section that controls the drive section to stop the operation piece when the detected position data outputted from the detection section coincides with the converted target position data XPD.